ABSTRACT OF THE DISCLOSURE

An inner core 62 and a resolver rotor 63 are secured to a rotary shaft 68 so that they are coaxial. A spacer 2, is provided between the inner core 62 and the resolver rotor 63. The spacer 2 and the inner core 62 are formed as a unit with separation, or space, between the spacer 2 and flange 41 of the inner core 62. The thickness of flange 41 is greater than the corresponding width of the corresponding part of the outer core, on which a rotary transformer input winding is wound. The resolver rotor 63 is a separate unit from the spacer 2 and the inner core 62, which facilitates automatic winding of the rotor. Grooves 3, 42 are formed in the spacer 2 and the flange 41 to accommodate a crossover wire 60.